

- 14 -

**WHAT IS CLAIMED IS:**

1. A method in a packet switched telecommunications network comprising a plurality of nodes for providing  
5 resource reservation between a reservation initiator (RI) and a reservation receiver (RR) comprising the steps of:

- 10 - defining an object including descriptors of the desired Quality of Service (QoS), packet level traffic parameters characterizing the traffic envelope, and one or more sub-objects of description of the source statistics for a call admission control (CAC);
- 15 - initializing reservation for a flow of transmission in the reservation initiator;
- reserving resources in the nodes along the flow of transmission;
- receiving reservation message in the reservation receiver;
- 20 - sending back an acknowledgement to the reservation initiator.

2. The method of claim 1 wherein packet switched telecommunications network is an IP based network.

3. The method of claims 1 - 2 wherein nodes are  
25 routers of a Terrestrial Radio Access Network of a Universal Mobile Telecommunications Network (UTRAN).

- 15 -

4. The method of claims 1 - 3 wherein the call admission control uses at least one sub-object of source statistics description in each node along the flow of transmission.

5 5. The method of claims 1 - 3 wherein the call admission control uses at least one sub-object of source statistics description in edge nodes of a resource domain along the flow of transmission.

10 6. A system for providing resource reservation in a packet switched network including a reservation initiator (RI), a reservation receiver (RR) and a plurality of nodes linked together by transmission channels, in which system the resource reservation of an ON-OFF like traffic is implemented and wherein at least  
15 a part of the plurality of nodes include:

- means for processing descriptors of the desired QoS;
- means for processing packet level traffic parameters characterizing the traffic envelope,  
20 and
- means for processing description of the source statistics.

25 7. The system of claim 6 wherein the reservation initiator (RI) is a base station controller and the reservation receiver (RR) is a radio network controller of the packet switched network.

- 16 -

8. The system of claim 6 wherein the reservation initiator (RI) is a radio network controller and the reservation receiver (RR) is a base station controller of the packet switched network.

5 9. The system of claims 6 - 8 wherein the nodes are IP routers of an IP network.

10. A node in a packet switched telecommunications network including sub-objects of

- descriptors of the desired QoS;

10 - packet level traffic parameters characterizing the traffic envelope, and

- description of the source statistics;

11. The node of claim 10 wherein the sub-object of description of the source statistics comprises  
15 information about type and at least one parameter of the distribution of the traffic.

12. The node of claims 10 - 11 wherein the traffic is an ON-OFF like traffic.

13. The node of claim 12 wherein the distribution type  
20 of the length of the ON and/or OFF periods are exponential.

14. The node of claim 12 wherein the parameter of the length of the ON periods is the mean time of ON periods.

- 17 -

15. The node of claim 12 wherein the parameter of the length of the OFF periods is the mean time of ON periods.